Serial No. 09/681,652   RD-27,989

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Graichen et al.

Serial No.: 09/681,652   Group Art Unit: 2184

Filed: May 16, 2001   Examiner: Wilson

Title: System, Method And Computer
       Product For Performing Automated
       Predictive Reliability   Response to Paper No.: 3

REQUEST FOR RECONSIDERATION

Box Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 2213-1450

Sir:

Applicant has carefully considered the Office Action mailed on June 11, 2003. Applicant requests further examination and reconsideration of the present patent application.

The Examiner rejected claims 1, 2, 6, 9, 10, 11, 12, 20, 23, 24, 28, 29, 32, 34 and 38 under 35 USC §103(a) as being unpatentable over Harris et al. (US Patent Application Publication Number 2002/0091972) in view of Eastman et al. (US Patent Number 6,226,597). Applicant respectfully traverses the §103(a) rejection of the present patent application and submits that claims 1, 2, 6, 9, 10, 11, 12, 20, 23, 24, 28, 29, 32, 34 and 38 are patentable over the combination of Harris et al. (hereinafter Harris) in view of Eastman et al. (hereinafter Eastman).
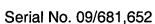
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EXHIBIT B

Independent claims 1, 6, 9, 20, 24, 29 and 34 of the present invention each recites the limitation of determining age information from service data and generating a statistical model based partly on the age information.

The Examiner submitted that Harris does disclose the limitation directed to determining age information and has cited page 2, paragraph 0023 in Harris as providing support. Applicant carefully reviewed this section and submits that Harris does not teach or provide a motivation suggesting the desirability of determining age information. Instead, this paragraph describes analyzing machine activity logs, error code logs, sensor logs and service history logs to identify features and events. None of the descriptions provided in paragraph 0023 for machine activity logs, error code logs, sensor logs and service history logs teach or suggest the use of age information.

With regard to generating a statistical model based partly on age information, the Examiner submitted that Harris does disclose this limitation and has cited page 2, paragraph 0012 in Harris as providing support. Applicant carefully reviewed this section noted by the Examiner and submits that Harris does not teach or provide a motivation suggesting the desirability of generating a statistical model based on age information. Instead, this paragraph teaches that predictive models are created based on analysis of historical operating data, which includes machine activity logs, error code logs, sensor logs and service history logs. As mentioned above, none of the descriptions provided in paragraph 0023 for machine activity logs, error code logs, sensor logs and service history logs teach or suggest the use of age information. Furthermore, Harris' description of the analysis of historical operating data, which is found at least in paragraphs 0024 and 0035, does not disclose or suggest the desirability of generating a statistical model based on age information. Instead of using age information to generate the model, Harris uses discovered patterns and associations in events to generate the predictive models.

Another claim limitation that is missing from Harris is using simulation to predict future failures for the life cycle of the plurality of components. The Examiner noted that this limitation is missing from Harris and added Eastman for its disclosure of a simulation. In support of the combination of Harris and Eastman, the Examiner

submitted that a person of ordinary skill in the art would have been motivated to have a simulation component that predicts future failures for the life cycle of the plurality of components according to the statistical model because by detecting future failures of system components the operability of the system and its components can be maintained.

Applicant respectfully traverses the rationale used by the Examiner to combine the teachings of Harris with Eastman. Applicant submits that a person of ordinary skill in the art at the time of the invention would not have a reason or motivation to combine the teachings of Harris with Eastman to yield the claimed invention. In particular, Eastman like the claimed invention uses simulation to predict future failures, however, Harris uses predictive models to predict future failures. There is no need to use simulation in Harris to predict future failures because its predictive models perform this function. Therefore, Applicant submits that a person of ordinary skill in the art would not have a motivation to utilize the simulation functionality described in Eastman with the approach described in Harris, because Harris already uses the predictive models to predict future failures. There is no need to duplicate the same function with a different component. As a result, Applicant submits that the Examiner has not established a prima facie case of obviousness.

In light of the above-noted distinctions, Applicant submits that independent claims 1, 6, 9, 20, 24, 29 and 34 are patentable over the combination of Harris in view of Eastman. Claims 2, 10-12, 23, 28, 32, and 38 depend directly or indirectly from now presumably allowable claims 1, 9, 20, 24, 29 and 34 respectively, and thus are allowable by dependency. Accordingly, Applicant requests that the Examiner reconsider and remove the §103(a) rejection of claims 1, 2, 6, 9, 10, 11, 12, 20, 23, 24, 28, 29, 32, 34 and 38.

The Examiner rejected claim 4 under 35 USC §103(a) as being unpatentable over Harris in view of Eastman in further view of McDonald et al. (US Patent No. 6,530,065). The Examiner added McDonald et al. (hereinafter McDonald) for its disclosure of compiling results produced from the simulation. McDonald provides no teaching or motivation that suggests the desirability of determining age information

from the service data and generating a statistical model based partly on age information as set forth in claim 1. Since claim 4 depends from presumably allowable claim 1, Applicant submits that claim 4 is allowable by dependency and requests that the Examiner reconsider and remove the §103(a) rejection of this claim.

Applicant appreciates the Examiner's indication that claims 3, 5, 7-8, 13-19, 21-22, 25-27, 30-31, 33 and 35-37 contain subject matter that would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the foregoing remarks, Applicant requests that the Examiner reconsider this application and allow claims 1-38.

If the Examiner has any questions regarding the present patent application, the Examiner can call Applicant's attorney, David Goldman, at telephone number (518)-387-5927 or (518)-387-5903.

Respectfully submitted,

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Schenectady, New York
Dated: September 5, 2003